

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of detecting the presence of a phospholipid in a biological material, comprising the steps of:

- a) providing a biological material;
- [[a)]] b) ~~subjecting a~~ contacting the biological material [[to]] with at least one [[a]] binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin;
- [[b)]] c) ~~allowing binding between any phospholipid present~~ the biological material and the binding agent; and
- [[c)]] d) detecting the presence of any phospholipid bound to the binding agent or the binding agent bound to the biological material.

Claim 2 (original): The method of Claim 1, wherein:

the phospholipid comprises phosphatidylserine.

Claim 3 (original): The method of Claim 1, wherein:

the phospholipid comprises a phospho-L-serine moiety of phosphatidylserine.

Claim 4 (original): The method of Claim 2, wherein:

the biological material comprises a cell, a cell membrane, a cell appendage, a cell fragment, a lipoprotein, or a cellular particle.

Claim 5 (original): The method of Claim 4, wherein:

any binding in step b) is independent of any Ca^{++} or phosphatidylethanolamine.

Claim 6 (original): The method of Claim 4, wherein:

any binding in step b) is increased with increasing of cell membrane curvature.

Claims 7 (currently amended): The method of Claim 2, wherein:

any binding in step b) increases proportionally to the content of phosphatidylserine over in a range of about 0-2%.

Claim 8 (original): The method of Claim 4, wherein:

the cell membrane comprises a curved region.

Claim 9 (withdrawn): A method of blocking or reducing binding of a protein to a binding site, comprising:

subjecting a binding site to a binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin.

Claim 10 (withdrawn): The method of Claim 9, wherein:

the binding site comprises a phospholipid or a lipoprotein.

Claim 11(withdrawn): The method of Claim 10, wherein:

the phospholipid comprises phosphatidylserine.

Claim 12 (withdrawn): The method of Claim 10, wherein:

the phospholipid comprises a phospho-L-serine moiety of phosphatidylserine.

Claim 13 (withdrawn): A method of detecting phosphatidylserine-expressing cells, comprising:

- a) subjecting a biological material including, or suspect of including, phosphatidylserine-expressing cells to a binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin;
- b) allowing binding between any cells present and the binding agent; and
- c) detecting the presence of any phosphatidylserine-expressing cells bound to the binding agent.

Claim 14 (withdrawn): The method of Claim 13, wherein:

the phosphatidylserine-expressing cells are selected from the group consisting of apoptotic cells, malignant cells, undifferentiated cells, immature cells, integrin-displaying cells, and a combination thereof.

Claim 15 (withdrawn): A method of protecting a biological material from the action of an enzyme, comprising:

- a) subjecting a biological material to be protected from an enzyme to a binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a

- functional equivalent of a fragment of lactadherin; and
- b) allowing binding between the biological material and the binding agent to protect the biological material from the enzyme.

Claim 16 (withdrawn): A pharmacological bridge ligand, comprising:

lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, or a functional equivalent of a fragment of lactadherin.

Claim 17 (withdrawn): A composition for detecting the presence of a phospholipid in a biological material, comprising:

- a) a binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin; and
- b) a suitable carrier.

Claim 18 (currently amended): A kit for detecting the presence of a phospholipid in a biological material, comprising:

- a) [[a]] at least one binding agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin; and

- b) instructions for use of the binding agent.

Claim 19 (original): The kit of Claim 18, wherein:

the phospholipid comprises phosphatidylserine.

Claim 20 (original): The kit of Claim 18, wherein:

the phospholipid comprises a phospho-L-serine moiety of phosphatidylserine.

Claim 21 (withdrawn): The method of Claim 13, wherein:

the phosphatidylserine - expressing cells comprise blood platelets or nucleated cells.

Claim 22 (withdrawn): A method of blocking or reducing the procoagulant activity of a cell, comprising:

- a) subjecting a cell to an agent selected from the group consisting of lactadherin, a fragment of lactadherin, a functional equivalent of lactadherin, and a functional equivalent of a fragment of lactadherin.

Claim 23 (withdrawn): The method of Claim 22, wherein:

the agent blocks or reduces the procoagulant activity of the cell by
binding with a phospholipid exposed on the cell membrane.

Claim 24 (withdrawn): The method of Claim 23, wherein:

the phospholipid comprises phosphatidylserine.

Claim 25 (withdrawn): The method of Claim 24, wherein:

the cell comprises a blood platelet.

Claim 26 (currently amended): A probe for detecting the presence of a phospholipid
in a biological material, comprising:

one or more of lactadherin, a fragment of lactadherin, a functional
equivalent of lactadherin, or a functional equivalent of a fragment of
lactadherin.

Claim 27 (original): The probe of Claim 26, wherein:

the phospholipid comprises phosphatidylserine.